

Screening for Cervical Cancer – Updated 3/25/08

PAP screening should begin within three years of the onset of sexual activity or at the age of 21 in a patient with an uncertain history of sexual activity.

HIV+ patients should be screened every six months during their first year of diagnosis and then yearly if the initial tests are negative.

Screening for cervical cancer is of particular concern for HIV infected women since the incidence of cervical dysplasia is 4 to 5 times higher in HIV-positive women as compared to HIV-negative women. Cervical dysplasia is common in HIV infected women because: 1) both HIV and HPV are sexually transmitted, and 2) HIV infected women are more likely to have persistent HPV infection, and 3) Persistent infection with one or more oncogenic HPV subtypes is a major factor in pathogenesis of pre-malignant and malignant cervical disease. Given the increased risk of cervical cancer in HIV+ patients, screening should continue on a yearly basis indefinitely. Women who have had hysterectomies for benign reasons and no longer have their cervix do not need PAP smears. Women who have hysterectomies for cancer or severe dysplasia should continue to have PAP smears to sample cells from their vaginal vaults to screen for vaginal cancer.

2001 Consensus Guidelines changed the pathologic categorization of PAP smear abnormalities. The revised Bethesda System is as follows:

ASC-US	atypical squamous cells of undetermined significance
ASC-H	atypical squamous cells, cannot rule out HSIL
AGC-NOS	atypical glandular cells not otherwise specified
AGC favor neoplasia	atypical glandular cells favor neoplasia
AIS	endocervical adenocarcinoma in situ
LSIL	low-grade squamous intra-epithelial lesion
HSIL	high-grade squamous intra-epithelial lesion

The pathology department at HMC more or less follows the revised nomenclature. **It is to be recalled that the terms CIN1, CIN2, or CIN3 (cervical intra-epithelial neoplasia) are diagnoses made by biopsy and not with a PAP smear.** Below you will find the recommendations from the **2006 Consensus Guidelines** for the initial evaluation of each given PAP smear abnormality.

ASC-US ASC-US is quite common in HIV-infected women. Previously, based on studies that had reported a high prevalence of both HPV DNA positivity and significant cervical pathology in this population, it was recommended

that all immunosuppressed women with ASC-US undergo colposcopy. More recent studies have found a lower prevalence of CIN 2,3 and HPV DNA positivity; therefore, immunosuppressed women should be managed in the same manner as women in the general population.

The preferred evaluation is based on reflex HPV testing for ASCUS and referral to colposcopy for positive HPV results. If negative HPV results, repeat cytology in 12 months. If at 12 months results are still ASCUS or higher, refer for colposcopy regardless of HPV results.

In post-menopausal women with evidence of vaginal atrophy, it is acceptable to treat the vaginal atrophy and repeat cytology screen in 1 year.

ASC-H If result shows ASC-US: cannot exclude High-Grade SIL, refer for directly for **colposcopy**.

For adolescent women (females 20 years and younger) with ASC-US or LSIL, repeat cytology q 12 months for 2 years regardless of HPV results. If persistent ASC-US or LSIL for > 2 years, refer for colposcopy.

AGC/AIS

Although uncommon, there is a high likelihood the patient will be found with CIN, biopsy proven AIS, or invasive cervical cancer. In addition, the traditional methods to evaluate AGC (ie repeat cytology, colposcopy, and endocervical sampling) have low sensitivities for glandular carcinoma. Therefore an aggressive and invasive approach is warranted in women with this cytologic abnormality. **Women with all subcategories of AGC, except atypical endometrial cells, should have colposcopy with endocervical sampling, HPV DNA testing and endocervical curettage. Women over 35 years old or those with abnormal vaginal bleeding should receive an endometrial biopsy. Women with atypical endometrial cells should have endometrial and endocervical sampling and if no pathology should be referred for colposcopy.**

The recommended postcolposcopy management of women of known HPV status with atypical endocervical, endometrial, or glandular cells NOS who do not have CIN or glandular neoplasia identified histologically is to repeat cytologic testing combined with HPV DNA testing at 6 months if they are HPV DNA positive and at 12 months if they are HPV DNA negative. Referral to colposcopy is recommended for women who subsequently test positive for highrisk (oncogenic) HPV DNA or who are found to have ASC-US or greater on their repeat cytologic tests. If both tests are negative, women can return to routine cytologic testing.

.LSIL

In general, these patients should be referred for **colposcopy**. If no CIN 2 or 3, repeat cytology at 6 & 12 mos OR repeat HPV DNA testing @ 12 mos. (This is a major change in guidelines as we used to follow these women with persistent LSIL with colposcopy every 6 mos).

However, **in post-menopausal women with evidence of vaginal atrophy**, it is acceptable to treat with **intravaginal estrogen therapy and repeat Pap in 6-12 months. Refer to colposcopy if persistent changes**

HSIL

An immediate loop electrosurgical excision or colposcopy with endocervical sampling is acceptable for managing women with HGSIL. In women with HSIL cytology result, who are poor candidates for continued follow-up, consider referring directly for LEEP instead of colposcopy.

When CIN 2,3 is not identified histologically, either a diagnostic excisional procedure or observation with colposcopy and cytology at 6 month intervals for 1 year is acceptable, provided in the latter case that the colposcopic examination is satisfactory and endocervical sampling is negative

In adolescents with HSIL, colposcopy is recommended. Immediate loop electrosurgical excision (ie, "see-and-treat") is unacceptable in adolescent women. When CIN 2,3 is not identified histologically, observation for up to 24 months using both colposcopy and cytology at 6-month intervals is preferred, provided the colposcopic examination is satisfactory and endocervical sampling is negative

Management of Abnormal PAP smears during pregnancy

Management of the above lesions during pregnancy becomes increasingly difficult with increasing severity of the cytologic lesions. Colposcopy with biopsy is safe during pregnancy. However, endocervical curettage and invasive cervical biopsy procedures are contraindicated during pregnancy. The decision for colposcopy is unchanged during pregnancy. In the absence of invasive disease, additional colposcopy and cytologic evaluation is recommended. In the absence of invasive disease, treatment of lesions is unacceptable. A diagnostic excisional procedure (ie cone biopsy) is recommended only if invasive disease is suspected. Reevaluation with cytology and colposcopy is recommended no sooner than 6 weeks postpartum for pregnant women with HSIL in whom CIN 2,3 is not diagnosed